



SurgeArrest® Panelmount Surge Protection Device (PMI2XLM or PMH2LXM)

User's Manual

990-0535 6/01

Introduction

Thank you for choosing APC's SurgeArrest PMI2XLM or PMH2LXM Panelmount Surge Protection Device!

This User's Manual provides basic information about the PMI2XLM or PMH2LXM SurgeArrest Panelmount Surge Protection Device (SPD), as well as the optional Flush-Mount Kit. Note: SPDs are also known as Transient Voltage Surge Suppressors (TVSS).

Proper installation is imperative to maximize the effectiveness and overall performance of this device. **This device must be installed by a qualified/licensed electrician.** The electrician should follow the steps outlined in the *Service Manual* to insure proper installation. **A copy of the electrician's invoice detailing installation of this device is required in order to obtain warranty service for the device.** Note: Certain regulations require that information pertaining to installation and maintenance of the unit be provided in a separate *Service Manual* (provided).

The PMI2XLM or PMH2LXM is a single port parallel SPD designed for use in South America, specifically in service entrance and downstream panelboard applications. **Note: APC products are extensively tested to industry standards as set by IEC 60950.** The PMI2XLM or PMH2LXM uses a chase nipple for installation, offers an 80kA per phase (maximum) surge current rating, and provides protection from damaging transient voltage surges and spikes.

The PMI2XLM or PMH2LXM SPD (Figure 1) can be mounted three ways. The preferred method of installation is to mount the SPD directly to the outside of the distribution panelboard using the integral chase nipple on the body of the SPD. It can also be installed against a panel/wall using installer-supplied hardware, or it can be installed using an optional Flush Mount Kit (part number: FMK2). The latter two methods require use of additional conduit and hardware (not provided).

The optional Flush Mount Kit is available for use in applications where, for asthetic purposes, the user desires a finished look to the overall installation. The Flush Mount Kit is installed to a substrate (drywall, paneling, plywood, etc.) with the SPD mounted in a hole created by the installer.

Parts List, Inspection, Safety, and Use

1 Parts List and Inspection

Items included in the package consist of the following:

- 1 PMI2XLM or PMH2LXM Panelmount SPD.
- 1 User's Manual (this document).
- 1 Service Manual
- Warning Labels (must be installed on or near the unit and be visible at all times).

If the Flush Mount Kit was ordered, additional parts are supplied as follows:

- 1 Flush-mount panel
- 4 Pan-head Screws

Carefully inspect each item in the package for signs of damage. If damage is found, please contact APC Technical Support (1-800-800-4APC). For more information about this product or other APC products, go to www.apc.com on the internet.

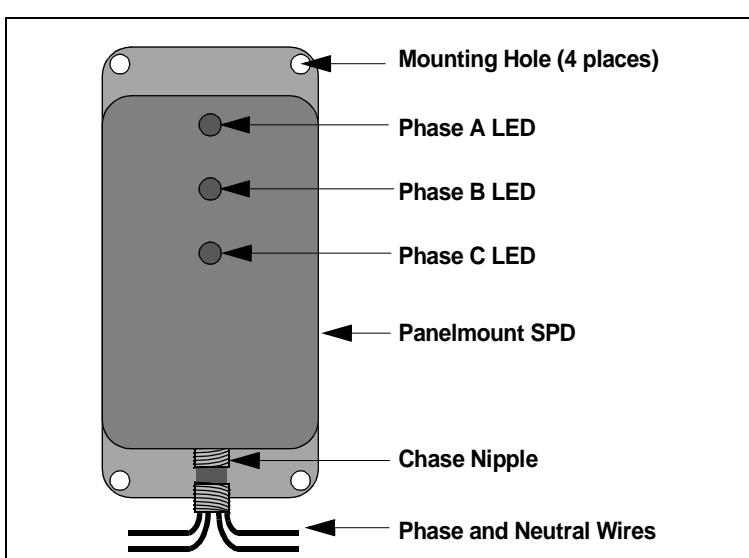
2 Safety Information

This section provides pertinent safety information that must be considered before having the Panelmount SPD installed.

- Do not install this device during a lightning storm.
- For indoor or outdoor use.
- Do not install the SPD in a hot or excessively moist location.
- Other safety considerations are defined in the *Service Manual*.
- The SPD must be installed by a qualified/licensed electrician.

3 How to Use the Panelmount SPD

After installation by a qualified/licensed electrician, the user only needs to be concerned with the status of each of the light emitting diodes (LEDs) on the front panel of the unit. Depending on the PM 2LM model installed, either 1 (single-phase applications) or 3 (3 phase applications) LEDs will illuminate on the SPD. If any connected phase LED on the SPD does not light, have a qualified/licensed electrician remove power, check all connections and test again. If any connected phase LED still does not illuminate, have the electrician contact APC Technical Support at 1-800-800-4APC or APC Technical Support at www.apc.com on the internet.



Specifications

Item	Specification
Voltage Rating	PMI2XLM = 220V, Single Phase. PMH2LXM = 220/380V 3-Phase, WYE.
Temperature - Operating Temperature - Storage	-40° C (-40° F) to +60° C (+140° F). -55° C (-67° F) to +60° C (+140° F).
Audible Noise	None
Service Clearance	36 inches (94.1 cm) in front of the unit.
Installation Type	Chase Nipple
Wire Length vs. Response Time and Let-Through Voltage	1 foot (31.7 cm) of wire = 1 nanosecond. 175 volts per foot (6kV/3kA, 8/20 micro-seconds) are added to the clamping voltage.
Wire Size and Installation Torque	Wire Size = #12 AWG (2 mm) Torque to 18 in. lbs. (2.0337 N M)
Circuit Breaker Connection	20 amp

Warranty and Service

APC warrants its Panelmount SPD products against defects in workmanship and materials for 5 years from the date of original purchase. The panelmount SPD must be installed by a qualified and licensed electrician to qualify for warranty protection.

Liability is limited to the replacement of the defective product. A Return Material Authorization (RMA) must be given by APC prior to the return of any product (see Technical Support). A copy of the invoice from the installer (electrician or electrical service company) must accompany the defective device being returned. If the return of a device is authorized by APC, APC will immediately ship a replacement unit to the customer. Along with the replacement unit, APC will include a pre-paid shipping tag for the return of the originally defective unit. The replacement unit will not be warranted unless the defective unit is received by APC.

Under no circumstance is APC responsible for the cost of removal or installation of any panelmount SPD.

The company specifically disclaims all other warranties, expressed or implied. Additionally, the company will not be responsible for incidental or consequential damages resulting from any defect in any product or component thereof.

Technical Support

United States and Canada: 1-800-800-4APC

This manual, as well as information about the entire APC product line are available on the internet at: www.apc.com. Prior to calling APC for technical assistance or ordering parts, please have the following information available:

Model Number of unit: _____

Serial Number of unit: _____

Manufacture Date: _____

Purchase Date: _____

Your Order Number: _____

Return Shipment Address: American Power Conversion Corporation
1600 Division Road
Dock 25
West Warwick, Rhode Island 02893 USA
Attn: RMA# _____